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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/522,249

01/25/2005

Kazuyuki Kashiwabara

2005-0091A

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WASHINGTON, DC 20006

EXAMINER

TAHA, SHAQ

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,249	Applicant(s) KASHIWABARA ET AL	
	Examiner SHAQ TAHA	Art Unit 2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 13-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 13-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a non-final action for application number 10/522,249 based on after a final filed on 12/31/2007. The original application was filed on 01/25/2005. Claims 1, 3 – 5, and 13 – 18 are currently pending and have been considered below. Claim 1 is amended. Claims 2, 6 – 12 are cancelled. Claims 1, 14, 15 and 16 are an independent claims.

Applicant's Response

Applicant's arguments with respect to claims 1, 3 – 5, and 13 – 18 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claim 4 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 1, 3, 5, and 13 - 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joon-Bo et al. (US 2002/0055978), in view of Matoba et al. (US 6,392,669).

Regarding claims 1, 14, 15 and 16, a device, having a master function for managing at least one slave device, for use in a network system in which a master device manages the at least one slave device, and the master device is allowed to shift a managing function thereof to one of the at least one slave device, the device comprising: an own device information managing section operable to manage own device information of the device, which includes at least predetermined information, regarding a state change of the device, **[(Joon-Bo et al.), Fig. 3, Ref # 300a shows a master device and slave devices, wherein one of the slave devices will become a master device depending on the state change of the device, The RSSI, which is measured by each slave and provided to the network master 400, is closely related to the distances between each of the network slaves 300 and the network master 400, (Joon-Boo et al., Paragraph 45, Page 30];**

an other device information managing section operable to manage other device information regarding at least one other device connected to the network system, the other device information including at least availability of the master function, **[(Joon-Bo et al.), Fig. 3, Ref # 300b shows a master device and slave devices, wherein one of the slave devices will become a master device depending on the state change of the device, The RSSI, which is measured by each slave and provided to the**

network master 400, is closely related to the distances between each of the network slaves 300 and the network master 400, (Joon-Boo et al., Paragraph 45, Page 30];

a device information processing section operable, when the device operates as the master device, to specify, at a predetermined time, a slave device from among a plurality of slave devices which are the master device candidates indicated by the schedule information in a segment of at least time of day or season corresponding to the predetermined time based on the other device information, **[In the step (b), a slave having higher RSSI is given a higher priority, which is used to choose a new network master, wherein one of the slave devices is chosen to become master device depending on the information received regarding that device, (Joon-Boo et al., Paragraph 16, Page 2)];**

and operable to obtain predetermined information regarding a state change of the specified slave device from the specified slave device, **[determining a rank indicating an order for choosing the new network master, which is received before the disappearance of the preexisting network master, wherein a slave device is chosen to become master depending on predetermined information regarding that slave device, (Joon-Boo et al., Paragraph 20, Page 2)];**

and a switch controlling section operable to compare the predetermined information regarding the state change of the specified slave device obtained by the device information processing section with the predetermined information regarding the state change of the device included in the own device information, and operable, when the

state change of the specified slave device is smaller than the state change of the device, to switch between a master operation operated by the device and a slave operation operated by the specified slave device, **[if the preexisting network master disappears, determining a rank indicating an order for choosing the new network master, which is received before the disappearance of the preexisting network master; and (c) changing a role to the new network master, if the rank is the highest, wherein to choose a new device to become a master device depends on the state change information if the slave device, wherein if the slave has a higher link quality then it becomes a master device, (Joon-Bo et al., Paragraph 20, Page 2)];**

Joon-Bo et al. fails to teach a schedule information managing section operable to manage schedule information indicative of master device candidates by a plurality of segments of at least time of day or season;

Matoba et al. teaches displaying a schedule for a plurality of users on a schedule management apparatus which is provided with a display screen and an input device and manages personal schedule information registered for each of the plurality of users, **(Matoba et al., Col. 3, Lines 16 – 20)**, in order to display a schedule of at least a part of said specified plurality of users based on the personal schedule information of said at least a part of said plurality of users, **(Matoba et al., Col. 3, Lines 20 – 25);**

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Joon-Bo et al. by including a schedule information managing section operable to manage schedule information indicative of master device

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candidates by a plurality of segments of at least time of day or season, displaying a schedule for a plurality of users on a schedule management apparatus which is provided with a display screen and an input device and manages personal schedule information registered for each of the plurality of users, **(Matoba et al., Col. 3, Lines 16 – 20).**

Regarding claim 3, the device according to claim 1, wherein the predetermined time is a time when a change occurs to the own device information of the device managed by the own device information managing section, **[Bluetooth equipped devices monitor the mutual connection status every cycle, for example, in a period of 0.625 ms-40.9 sec, with a link supervision timer. Based on this, the network slaves 300 check their connection status with the network master 400, wherein the time is the time when change occurs to the information of the device, (Joon-Bo et al., Paragraph 48, Page 4)].**

Regarding claim 5, the device according to claim 3, wherein the change of the own device information of the device is a reduction in communication quality, **[slave having higher link quality value is given a higher priority for being chosen as a new network master, (Joon-Bo et al., Paragraph 17, Page 2)].**

Regarding claim 13, the device according to claim 1, wherein the switch controlling section transmits the other device information managed by the other device information

managing section to the specified slave device, [**Network slaves 300 can read the RSSI value of a signal transmitted from the network master 400 using an HCI command, "Read-RSSI", prescribed in the Bluetooth standard, (Joon-Bo et al., Paragraph 45, Page 4)].**

Regarding claim 17, the device according to claim 1, wherein the master device candidates indicated by the schedule information in a segment of time of day is at least one device other than a device which is likely to be frequently used in the segment of the time of day, [**The RSSI, which is measured by each slave and provided to the network master 400, is closely related to the distances between each of the network slaves 300 and the network master 400, wherein the back up master is the slave device closest to the master device will be used more frequently, (Joon-Bo et al., Paragraph 45, Page 4)].**

Regarding claim 18, the device according to claim 1, wherein the master device candidates indicated by the schedule information in a segment of season is at least one device other than a device which is likely to be frequently used in the segment of season, [**in FIG. 5, slave A 300a is designated as the fourth ranked backup master BACKUP 4, slave B 300b is designated as the first ranked backup master BACKUP 1, slave C 300c is designated as the second ranked backup master BACKUP 2, slave D 300d is designated as the third ranked backup master**

**BACKUP 3, and slave E 300e is designated as the fifth ranked backup master
BACKUP 5, (Joon-Bo et al., Paragraph 47, Page 4)].**

- Claim 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joon-Bo et al. (US 2002/0055978), in view of Matoba et al. (US 6,392,669), and further in view of Palm et al. (US 2004/0218620).

Regarding claim 4, Joon-Bo et al. teaches a method for managing a network in which Bluetooth equipped devices are linked together when the network master cannot serve as a master, **(Joon-Bo et al., Abstract);**

The modified Joon-Bo et al. Fails to teach that the change of the own device information of the device is a reduction in a remaining amount of battery life;

Palm et al teaches mastering assignment may be performed in an effort to distribute mastering duties among the plurality of wireless terminals to uniformly drain the batteries of the wireless devices, **(Palm et al., Paragraph 24, Page 2);** in order to one of the wireless terminals acts as a master to coordinate the transmission and receptions of the slaves so as to reduce the power consumed by all of the devices, **(Palm et al., Abstract);**

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the modified Joon-Bo et al. by including that the change of the own device information of the device is a reduction in a remaining amount of battery life, mastering assignment may be performed in an effort to distribute mastering duties

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among the plurality of wireless terminals to uniformly drain the batteries of the wireless devices, **(Palm et al., Paragraph 24, Page 2)**; in order to one of the wireless terminals acts as a master to coordinate the transmission and receptions of the slaves so as to reduce the power consumed by all of the devices, **(Palm et al., Abstract)**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Shaq Taha** whose telephone number is 571-270-1921. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Jeff Pwu** can be reached on 571-272-6798.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free?).

/S. T./

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/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit 2146